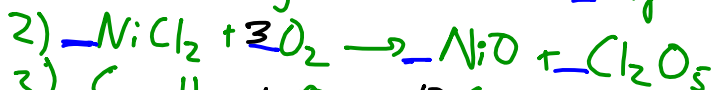
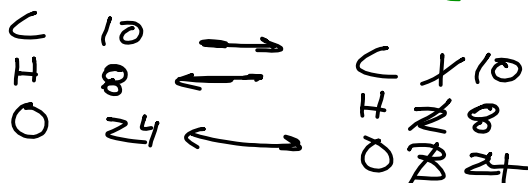
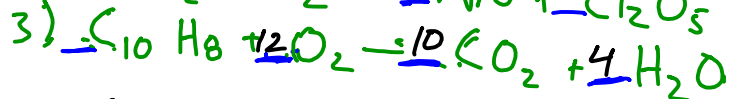


## Bellringer

→ Balance the following chemical equations:



Challenge



Bellringer

→ What are 2 examples of a mass-dependent (size) and a mass-independent (size) physical property?

• volume + mass ; mp, bp, density

→ What is the law of conservation of mass?  
What does it state? Give an example.

↖  
Burning log

Bellringer

→ What 3 things affect a reaction's rate?  
SA, temp, concentration

→ Balance



- 1) Ascorbic Acid
- 2) Baking Soda
- Middle = Unknown
- 3) Sugar
- 4) Corn Starch

pH  
indicator

### Bellringer

- What affects the rate of chemical reactions? (3 things)  
temperature, concentration, surface - area
- What is a solution?  $\xrightarrow{\text{pH}}$  acid?  $\xrightarrow{\text{base?}}$  (7)  
 $\xrightarrow{\text{same}}$
- Give 2 examples of a homogenous and a heterogeneous mixture  
 $\xrightarrow{\text{different}}$
- ★ → Which scientific law does "balancing equations" support? (Law of conservation of mass)
- Balance:  $\textcircled{R} \quad \textcircled{P}$   

$$2\text{H}_2\text{S} + 3\text{O}_2 \rightarrow 2\text{SO}_2 + 2\text{H}_2\text{O}$$

H	<del>X</del> 4		H	<del>X</del> 4
S	<del>X</del> 2		S	<del>X</del> 2
O	<del>X</del> 6	↔	O	<del>X</del> 6

Bellringer

→ What are a few "signs" that a chemical change has occurred? color change, smell / odor, bubbles, sound

→ What is the "Law of conservation of mass?"

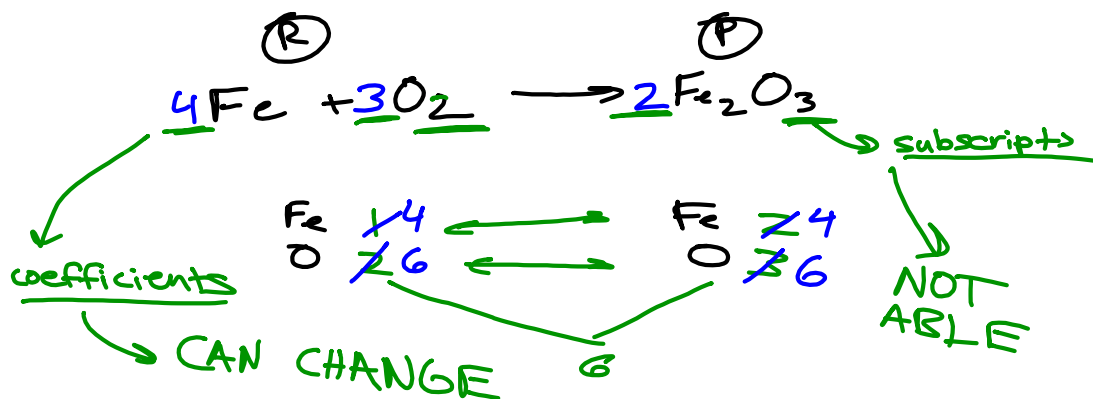
3 things

→ Affect rxn:

- 1) concentration
- 2) surface area
- 3) temperature

mass → weight + gravity

mass is not created nor destroyed



Grade: 8th  
Subject: Physical Science  
Date:

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1 The process of evaporating water from sea water for drinking is a \_\_\_\_\_

A chemical change

B chemical property

C physical change

D physical property

.

2 Which warning label indicates a chemical property of the material being labeled?

- A "Fragile"
- B "Flammable"
- C "Handle with care"
- D "Shake well"

.

3 Which of the following is a substance?

- A colloid
- B element
- C mixture
- D solution

.

4 Table salt (NaCl) has properties different from sodium (Na) or chlorine (Cl) alone.

True

False

.

5 Brass, the metal, can be considered a solution because it is a homogenous mixture.

True

False

.

6 The difference between a mixture and a substance is that the composition of a mixture can vary while a substance is simply either an element or a compound.

True

False

.

7 A \_\_\_\_\_ is the combination of atoms of two or more elements.

compound

.

8 A substance is either an element or a compound.

True

False

.

9 In a chemical change, matter is neither created, but may be destroyed.

True

False

.

10 A change in size, shape, or state is a \_\_\_\_\_ change.

physical

.

11 A mixture that has parts that can be easily distinguished is a heterogeneous mixture.

True

False

.

12 A \_\_\_\_\_ is a homogenous mixture.

Solution

